MISSOURI BOTANICAL GARDEN

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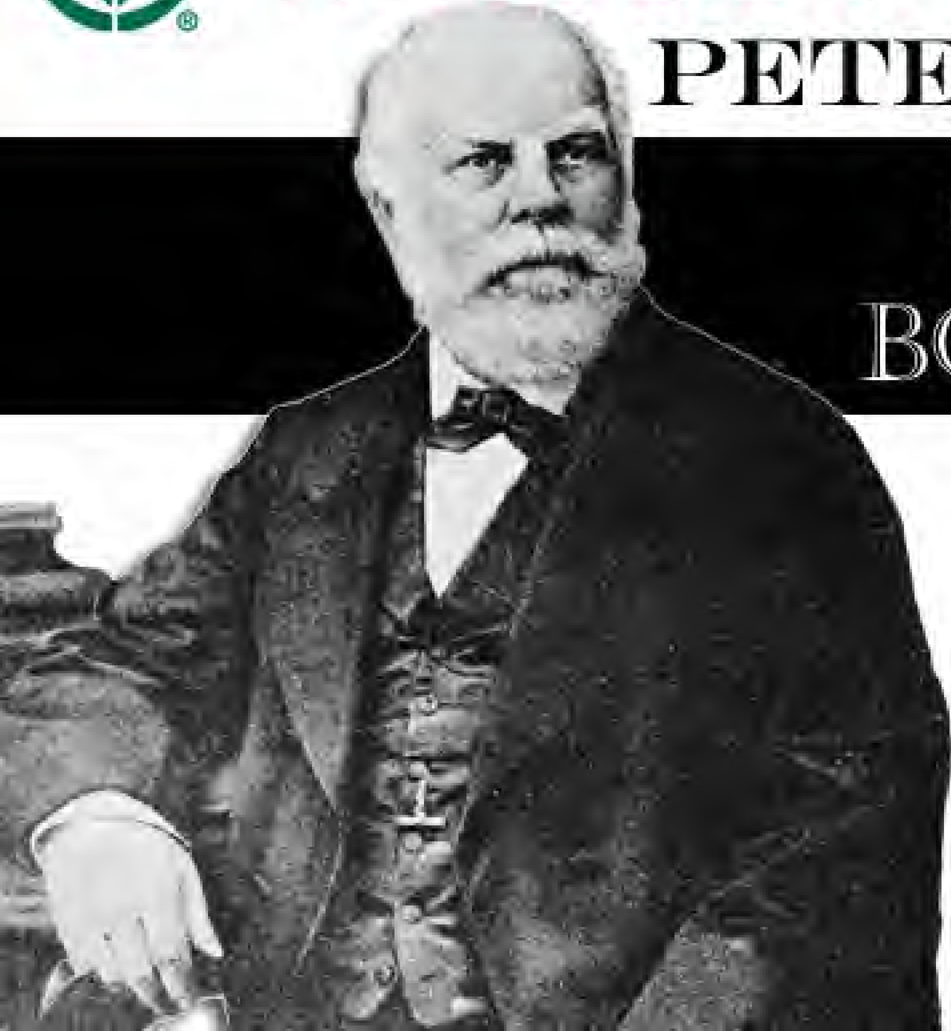


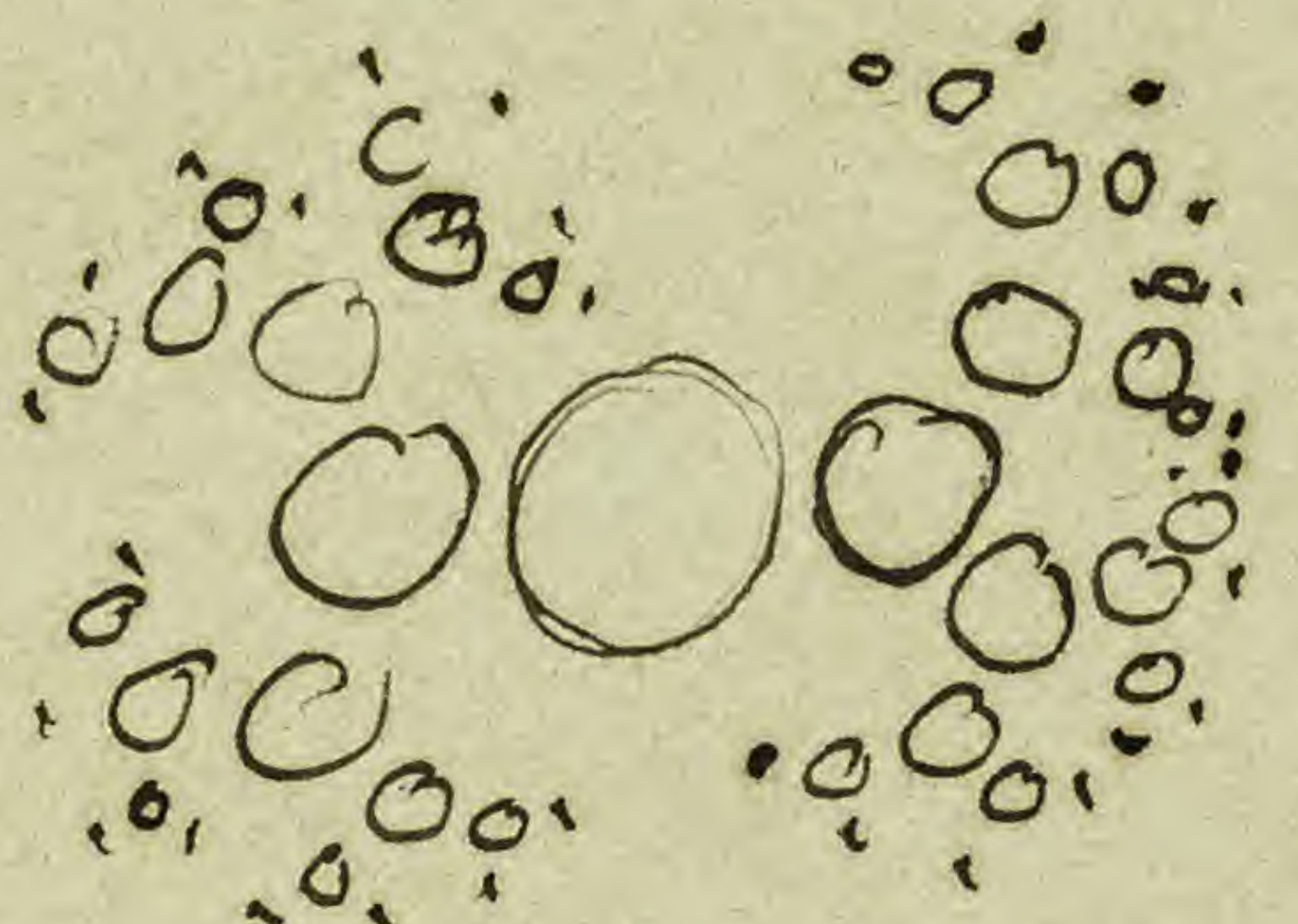
GEORGE ENGELMANN BOTANICAL NOTEBOOKS

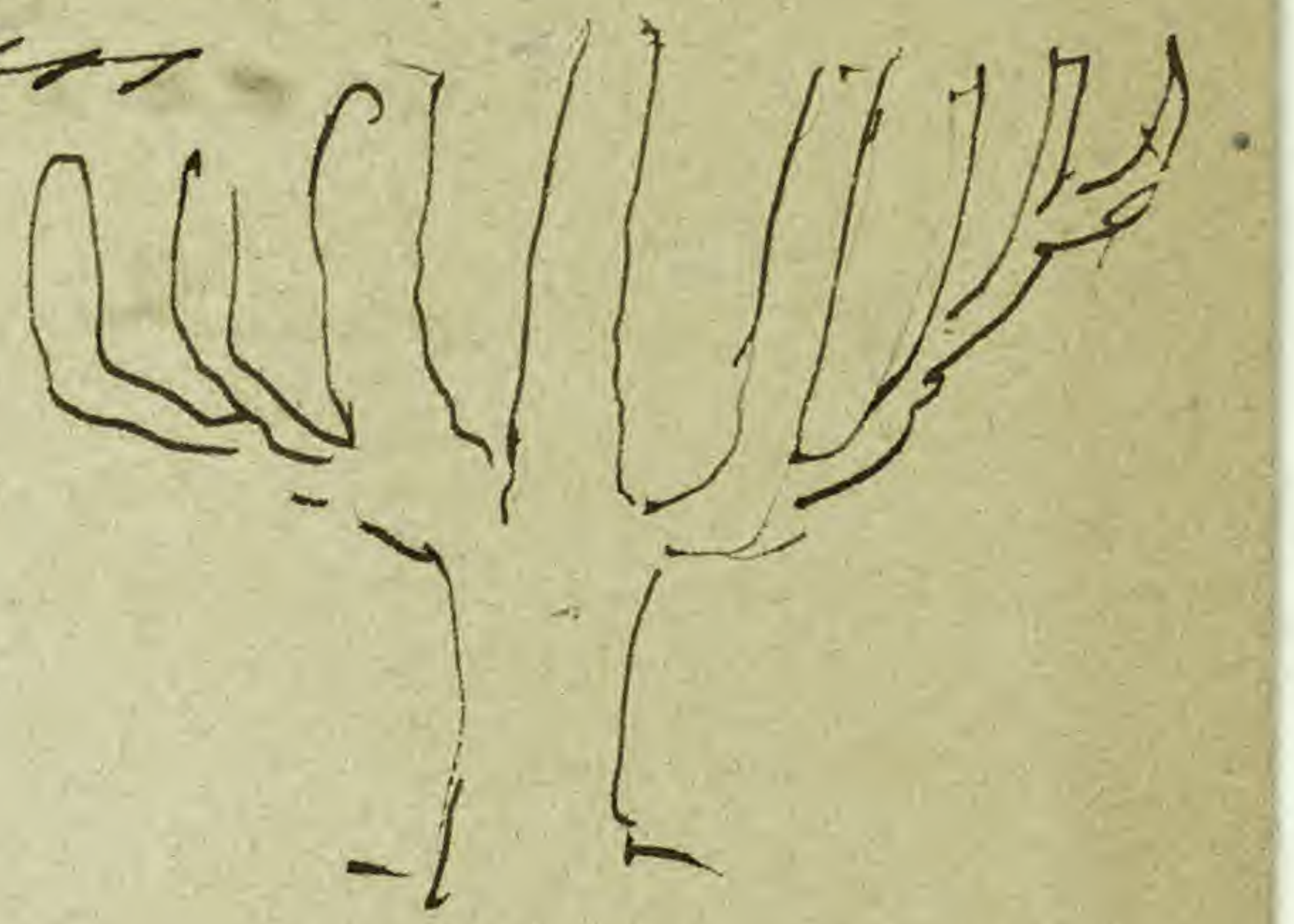
Pagination Note:
Since many of the items lack a specific page number, the page number displayed online refers to the sequentially created number each item was given upon cataloging the materials.

at Dr Webers March 31 1869

Cereus Candelaber Weber mss

A most peculiar plant
a few miles south of
Tehuacan, lower,
in the sugar cane region

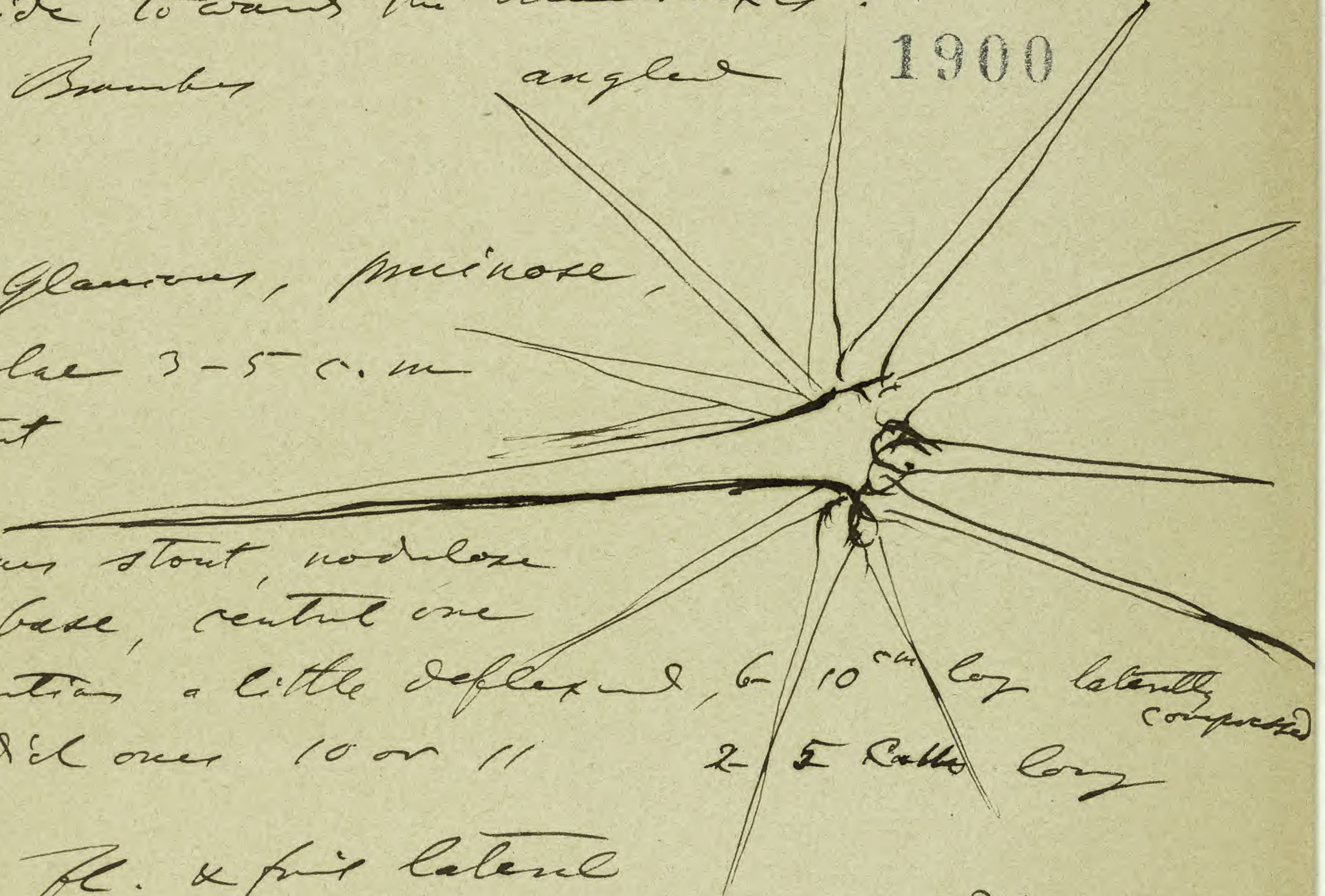




plant 10 metres high, and of same diameter with Branches two and each branch produces near the base two branchlets again, all ascending, branching always outward, no branches form inside, toward the main axis.

Branches angled

1900



Glaucous, pruinose,
areolae 3–5 c.m
distant

Spines stout, nodulose
at base, central one
sometimes a little deflexed, 6–10 cm long laterally compressed
radial ones 10 or 11 2–5 [illegible] long

fl. & fruit lateral
Flower 8–10 c m long, white, diurn
scales numerous, imbricate, on tube & ovary
at last deciduous from fruit,
fruit as large as a small orange
with small sepaloid scales which in their axils

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bras tomentum and spices.
Seed sold in Market in Tehuacan
etc and (pounded) mixed in the Tortillas

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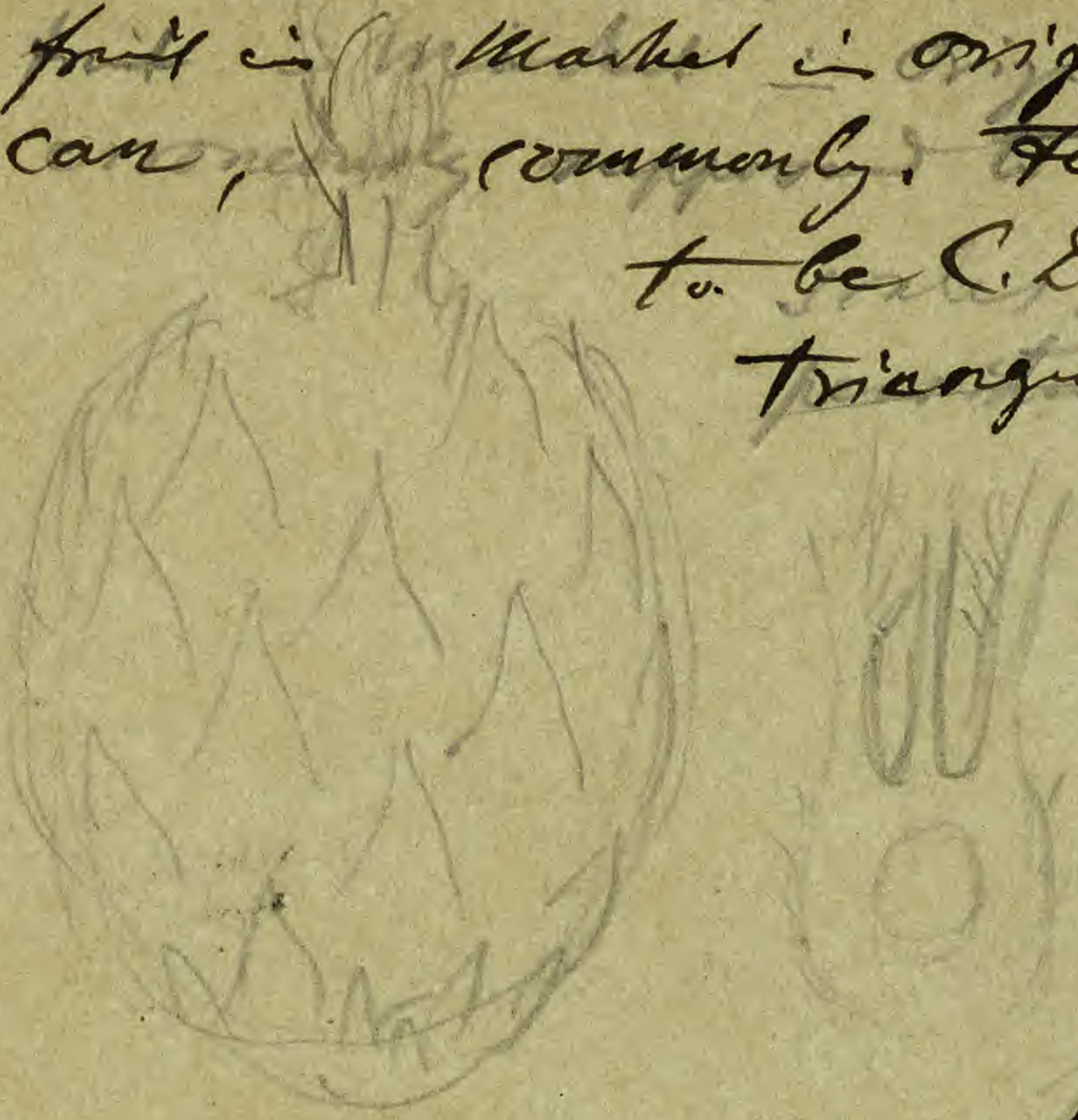
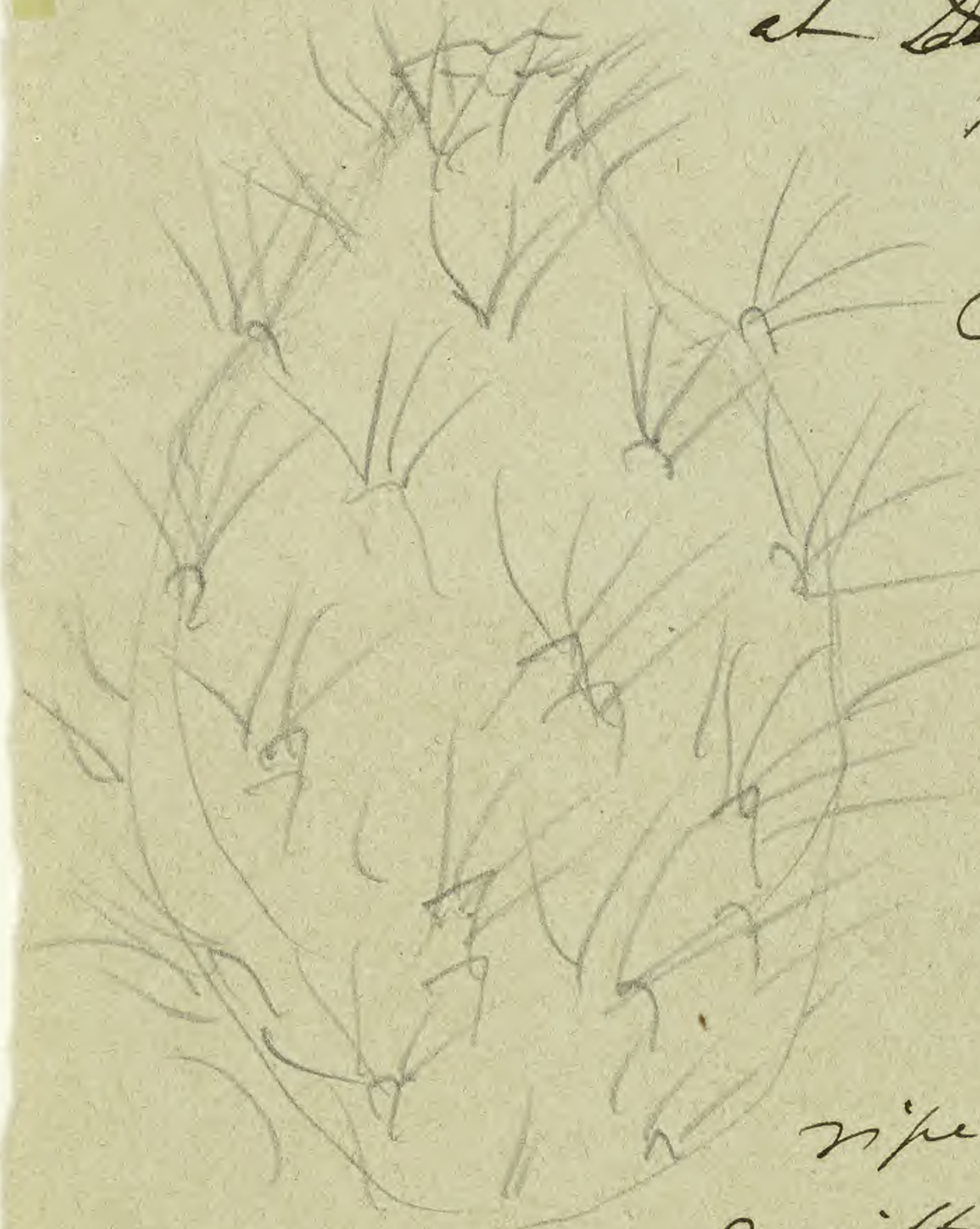
Cereus Chiotilla Weber mss   Paris March 22
1869

fruit in Market in Orizaba, but grows in Tehuacan, commonly. Formerly supposed by Web. to be C. Dumortieri; fruit with triangular, scarious scales ovary imbricately covered with them. Flower sulphur yellow; 8 yellow stigmata. fruit reddish brown bearing the dry persistent flower rests; ripe from May to July; the earliest Cactus fruit in Market.



1901

at Dr Weber's
Paris $\frac{22}{3}$ 69



Cereus serpentinus

unripe fruit.
not full grown
very spiny

seeds unusually
large -

ripe fruit red
covered with about 50
spiny areolae; spines deciduous
at maturity or easily
removed -

1902

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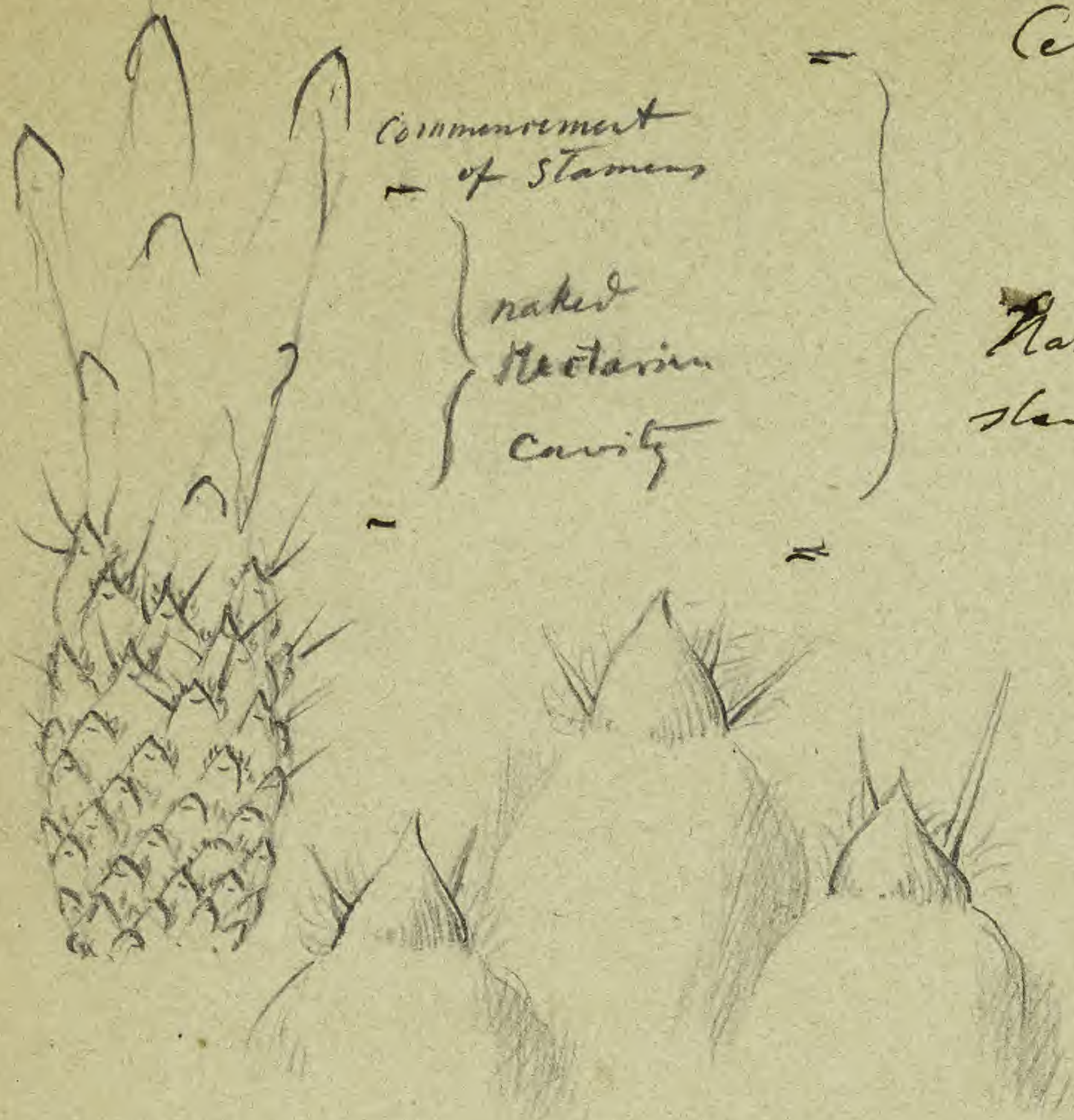
Cereus Queretarensis, Weber Mss
Dr Weber, Paris April 1869

Naked part of tube abt 10 l. long
staminate part 14 lines



upper part of ovary ×4

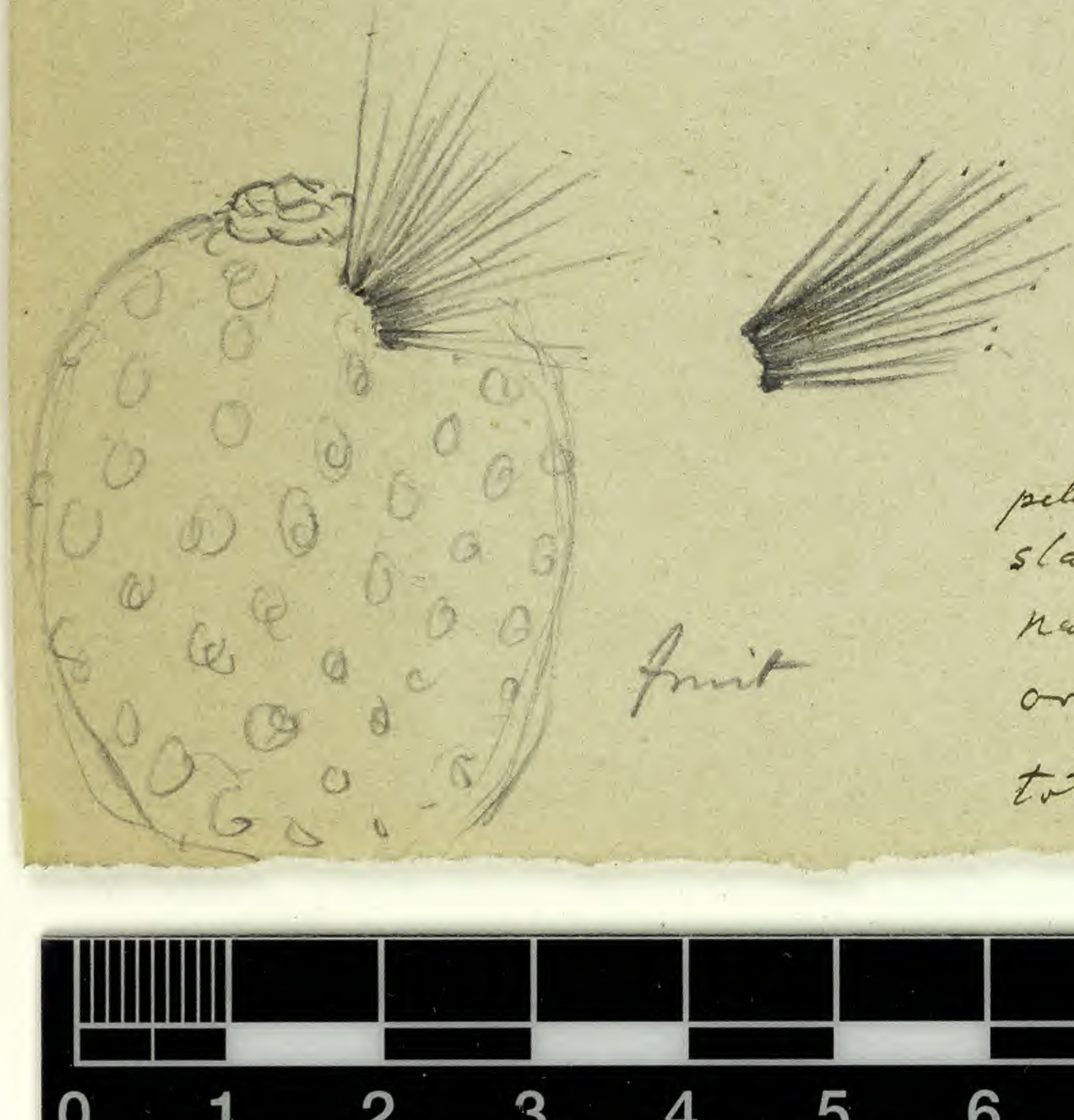
Ovary about 2 cm long oval, covered with 80 or 90 triangular fleshy sepaloid scales in the only ~~flower exa~~ fragment examined in 13/34 order;

scale of lower part of ovary ×4

These scales ~~seem~~ to spring from a protuberant pulvinus or tubercule and bear in their axils dense wool and a few short slender spines (at least the upper ones.).

These spines are more fully developed as the fruit matures and finally cover it with a dense ~~matting~~.

1903



fruit

Bunches of spines on fruit, dark & bulbous at base, yellowish ~~or~~ brownish, ½ to ¾ inch long 25 or 30 in number, in the specimen before me

petals above stamens perhaps 1½ ?
staminate part 14 l. } tube 2
naked part of tube 10 l. }
ovary — — — — 1
total flower perhaps long: 4½ inch

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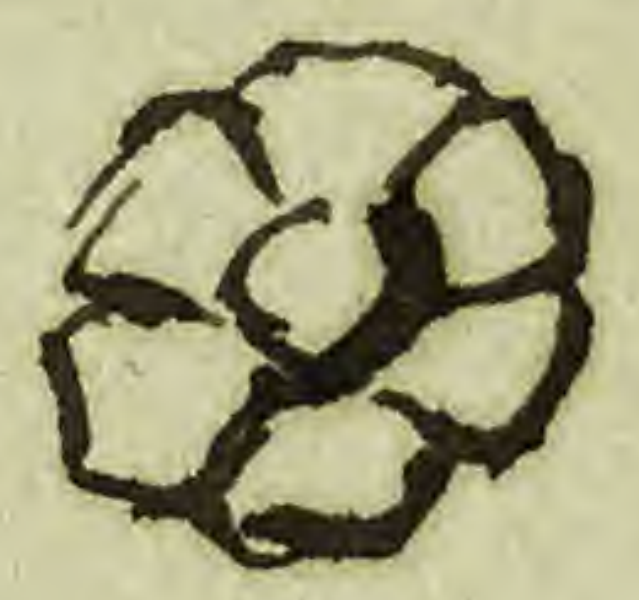
22/3 69

Cereus Queretarensis Weber mss.
Cultivated about Queretaro along roadsides and for fences, also native there —
6–8 metres high treelike, much branched; : flowers not spiny, but fruit very much so [looks like that of Cereus Emoryi]
flowers deciduous, leaving in the specimens before me a singular 6 angled



umbilicus

1904

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760-770

Gymnocarpi erecti saepe articulati
grandiflori nocturni

a Coroniferi
Corona staminea distincta

C. Seidelii
C. Chalybaeus
C. lividus
? C caerulescens ?
? C. glaucus

b. Continui
acoroni

C. Jamacaru
? C. variabilis
with above ?

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H. B. Saltzmann
1825

Ins. balear. Corsica

Cereus variabilis.

(Taf. XV.)

Cereus variabilis Pfr. Enum. p. 105. N. 98.
— — — — Pfr. Synon. S. 109. N. 75.
— — — — Lemaire Cact. gen. p. 79.
— — — — Walpers Repertor. II. p. 334.
— — — — Salm Cact. Dyck. 1844. p. 31.
— — Pitajaya DC. prodr. III. p. 466.
— — undulosus DC. revue p. 46. etc. etc.

C. suberectus, subarticulatus, simplex vel basi ramosus, viridis vel glaucescens; costis 3—5 subcompressis, obtusis, obrepandis; areolis plus minusve remotis, albo-vel fusco-tomentosis, parum lanatis; aculeis rectis, rigidis, exterioribus 6—8, centralibus 1—2, albis, flavidis vel nigricantibus.

Habitat in omnibus Americae calidae terris.

Wegen der unendlichen Uebergänge der Formen habe ich vor einer Reihe von Jahren eine grosse Menge der in den Gärten unter verschiedenen Namen kultivirten Cacteen unter dem Namen Cereus variabilis zusammengefasst, weil es durchaus unmöglich erschien, dieselben ohne genaue Kenntniss der vielleicht verschiedenen Blüthen von einander durch Diagnosen zu trennen. Seitdem habe ich ihn mehrmals blühen gesehen, und die hier abgebildete Form scheint ganz mit der bisher als C. obtusus Haw. betrachteten zusammenzufallen.

Die Veränderlichkeit der, wie es scheint, in allen heissen Ländern Amerika's, Mexiko, Peru, Brasilien, West-indien u. s. w. verbreiteten Pflanze, vermöge welcher sie oft in einem Jahre ein ganz anderes Ansehen zeigt, als im vorigen, beruhen in der Zahl der Kanten, der Länge der bald kurz-abgesetzten, bald säulenähnlich gestreckten Glieder, der Farbe des Stammes und der Areolen, so wie endlich der Zahl der Stacheln.

Die Blüthen erscheinen meist im Juli, öffnen sich gegen Abend, sind sehr ansehnlich, roth und weiss. Sie ragen aus den seitlichen Stammknoten ziemlich steif in die Höhe und die Röhre hat eine Länge von 6″. Der rundliche Fruchtknoten ist fast nackt, grün, nur mit wenigen röthlichen, dreieckigen Schüppchen besetzt, eben so der untere Theil der Röhre, an welchem noch immer nur das 3eckige, purpurrothe Spitzchen der Schuppen frei ist. Nach oben werden die Schuppen länger, breiter und gehen dann allmälig in die lanzettlichen, aussen purpurrothen, etwas abstehenden äussern Perigonialblätter über. Die eigentlichen Kronenblätter, ungefähr 12, stehen 2reihig, sind länglich-lanzettlich, an der Spitze etwas gezähnelt, schneeweiss, die äussern auf dem Rücken grünlich. Die grünlich-weissen Staubfäden entspringen meist aus dem Grunde der Röhre, aber ein einzelner Kreis von längern ist am Saume befestigt. Der Griffel ist länger als die inneren Staubfäden, weiss, mit 12—14 langen, auseinanderstehenden, gelben Narben.

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cm 0 1 2 3 4 5 6 7 8 9 10

Cereus variabilis Pfr.

(Pl. 15.)

Quand j'écrivais mon énumeration diagnostique des Cactées, je cherchais à trouver des caractères suffisans pour distinguer un certain nombre de plantes répandues dans toutes les collections sous les noms de Cereus Pitajaya, laetevirens, trigonus, prismatiformis, cognatus, affinis, glaucus speciosus etc. Bientôt j'ai trouvé, que toutes ces formes passaient insensiblement l'une à l'autre et qu'elles ne pouvaient être décrites comme espèces, sans en connaître exactement les fleurs. Ainsi je les réunissais provisoirement sous le nom de Cereus variabilis, auquel, ayant plusieurs fois vu ses fleurs, je crois, que le C. obtusus Haw. devra aussi appartenir.

La plante, dont nous parlons, est assez bien connue dans toutes les collections de Cactées. Elle varie presque dans tous les caractères, qui en général peuvent servir à distinguer les espèces. La tige a 3—5 côtes arrondies, elle est tout-à-fait simple ou rameuse à sa base, de couleur verte ou un peu glauque, composée d'articulations plus ou moins longues. Les aréoles sont rapprochées ou éloignées, garnies d'un duvet blanchâtre ou brunâtre, munies de 6—10 aiguillons droits, plus ou moins roides, blancs, bruns ou noirâtres, dont 1—2 sont posés au centre. Ils varient de 2—6 lignes de longueur.

Les fleurs paraissent en général au mois de Juillet, elles sont grandes et belles, de couleur blanche, rouges à l'extérieur. Elles s'épanouissent le soir et ne fleurissent que pendant une nuit. L'ovaire est un peu oblong, nu, vert, muni de 5—6 petites écailles rougeâtres à leur pointe. Le tube a une longueur de 6 pouces, il est vert et garni d'écailles d'un rouge violet à leur pointe libre, s'allongissant vers la corolle. Les sépales supérieurs sont lancéolés, libres, de couleur olivacée à pointe pourprée. Les feuilles périgoniales internes (pétales) sont environ au nombre de 12, rangées en 2 séries, celles de la série extérieure oblongues, verdâtres au dos, celles de l'intérieure plus larges, denticulées à leur sommet verdâtre. Les étamines sont nombreuses, d'un blanc verdâtre, à anthères oblongues jaunes. La plupart est fixée au fond du tube, une série régulière de filamens plus longs au bord du limbe. Le style est blanc, dépassant les étamines du tube, et se divise en 12—14 stigmates allongés, jaunes, divergens.

91 198
9

760-2

Cereus variabilis

May 1860 flowered in Hort Goebel :

	Goebel 1860		Kew 1869
P	~~25~~ 24'''		28'''
C		18	19
F	6		10
S	36		34
N	36		28
O	13		10
length of Flower	116'''		110'''
	9" 8'''		9" 2'''

P. = Petal, length of

1906

C Corona, lenth of Coronal stamens

F Faux, naked part, between mess of stamens and Corona

S. Staminate part of tube

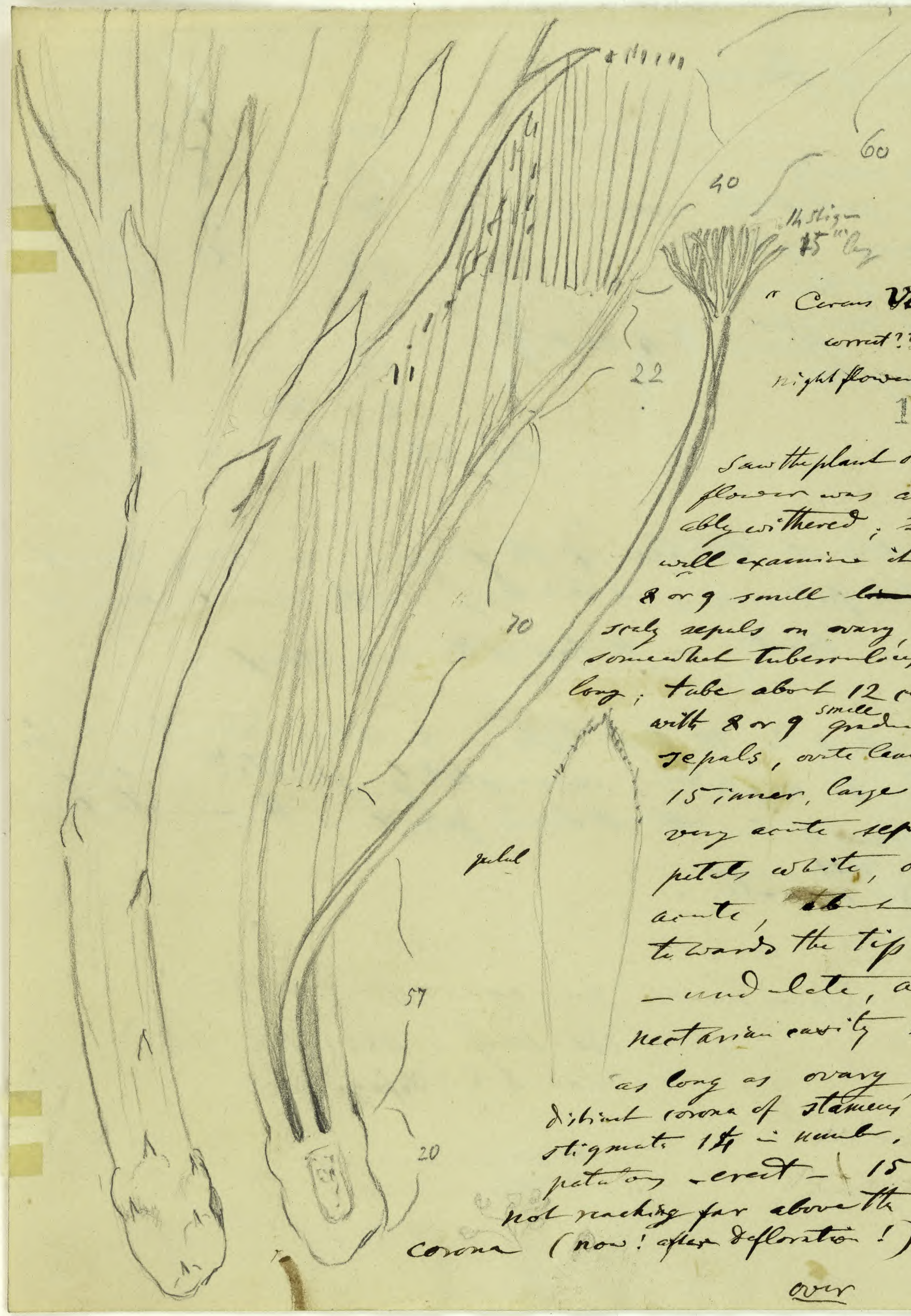
N Nectarian cavity, length of.

O Ovary, length of

springen meist aus dem Grunde der Röhre, aber ein einzelner Kreis von längern ist am Saume befestigt. Der Griffel ist länger als die inneren Staubfäden, weiss, mit 12—14 langen, auseinanderstehenden, gelben Narben.

altymed
1825

Hort. Kew.
Sept. 11 1869



" Cereus **variabilis**
correct?? Pfeiff "
night flowering white

1907

Saw the plant only after the flower was already considerably withered; still, could well examine it, except petals. 8 or 9 small ~~lan~~ lanceolate scaly sepals on ovary, which is uneven somewhat tuberculous, abt 2 cent long; tube about 12 cent long — with 8 or 9 small gradually enlarging sepals, ovate lanceolate — 15 inner, large oblong-lanceolate very acute sepals; petals white, oblanceolate, acute, ~~about~~ 15; towards the tip crenulate — undulate, acute — nectarian cavity nearly 3 times as long as ovary! distinct corona of stamens! stigmata 14 in number, linear patulous — erect — 15 mm long, not reaching far above the base of the corona (now! after defloration!)

over

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Dimensions of flowers

ovary	20
nectarian cavity	57
staminate part of tube	70
naked faux up to base of Corona	22
(length of coronal stamens (4 cent))	
length of petals.	60
	229 mm.

say. 23 cent or 9. inches

P C̲ 60 40
F 22
S 70
N 57
O 20
229

I notice at the base of the flower a very small sort of a peduncle, 1 mm long, with several minute scales — bracts. — the base of the ovary itself.

The plant is 10 feet high, 3 inches diameter or 3½ mostly 4-angled, incompletely jointed, does not seem to be the St Louis plant — larger, stouter — Angles* dentate — crenate.

(Same) flower from same specimen figured in Bot Mag t. 4084 (1844) — and the view of C. Pitajaya &c

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Kew Sept 1869

1908

Cer. Pitajaya DC Bm (C. variabilis Pfeiff)
Fl. in Hort Kew. 70 (1844) t. 4084
articulatus, 4 (3) angled –
("obtusus Haw seems very near or identical". G)

figures of the flower seen by me in Sept 1869. ovary with perhaps 8 short scales, few on tube – petals dentate, acuminate

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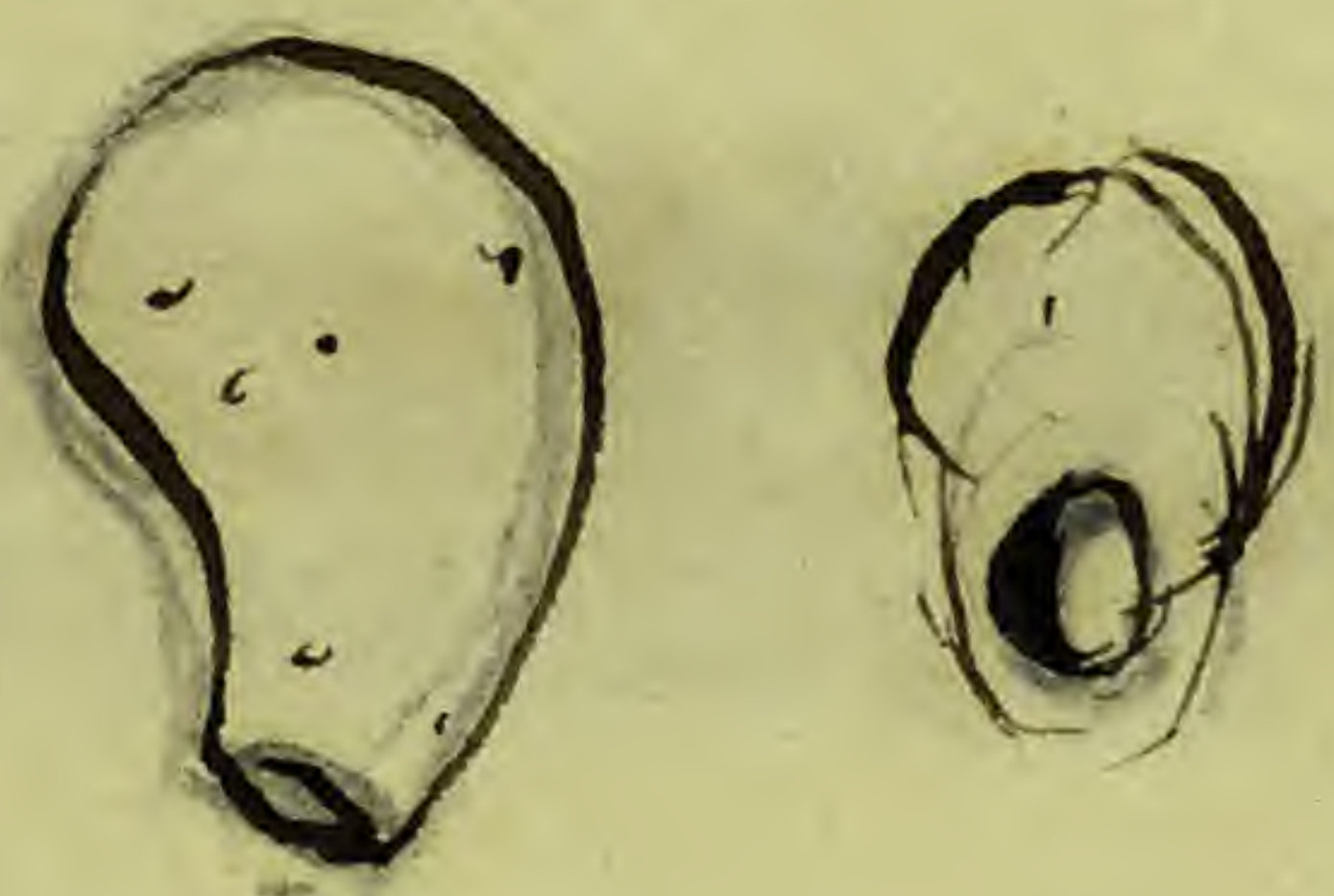
[illegible]
[illegible] naked [illegible]

May 1860

seed of Cer. variabilis ?



Raised at Goebels.

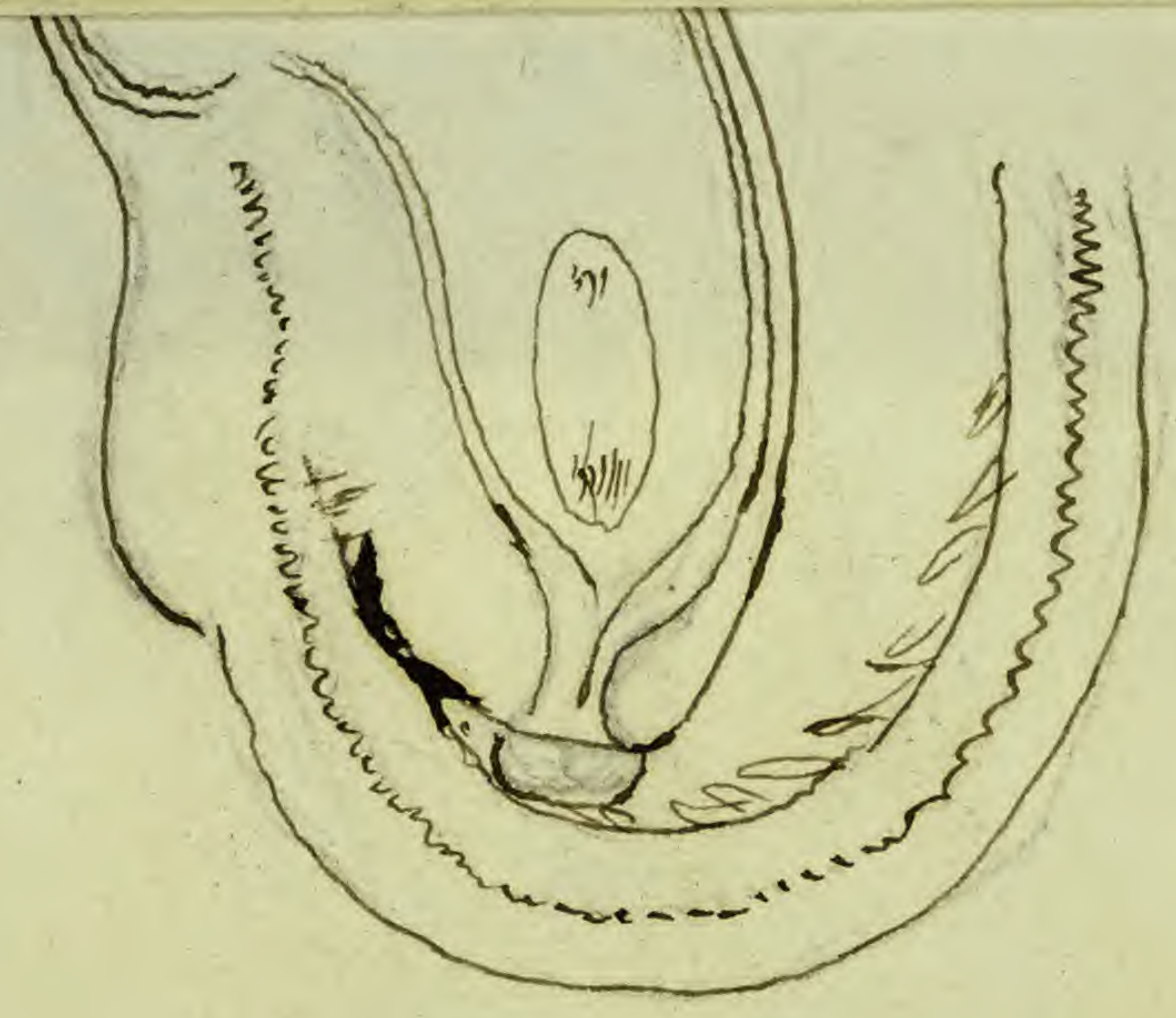
fruit naked, deep violet purple

seed black, smooth, shining, with few scattered irregular dots 0.9 l. long; hilum suborbicular, basal.

fruit bursting in two halves,
pulp with seeds falling out
ripening in 10 months

seed obovate very oblique ~~with narrow~~ from a narrow base
with ~~basal~~ orbicular hilum

1909



fecundation $\frac{17}{60}$-$\frac{18}{60}$ lin long.
or a little over $\frac{1}{4}$ line
on long, branched funicle.

1910

Missouri Botanical Garden
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cm 0 1 2 3 4 5 6 7 8 9 10

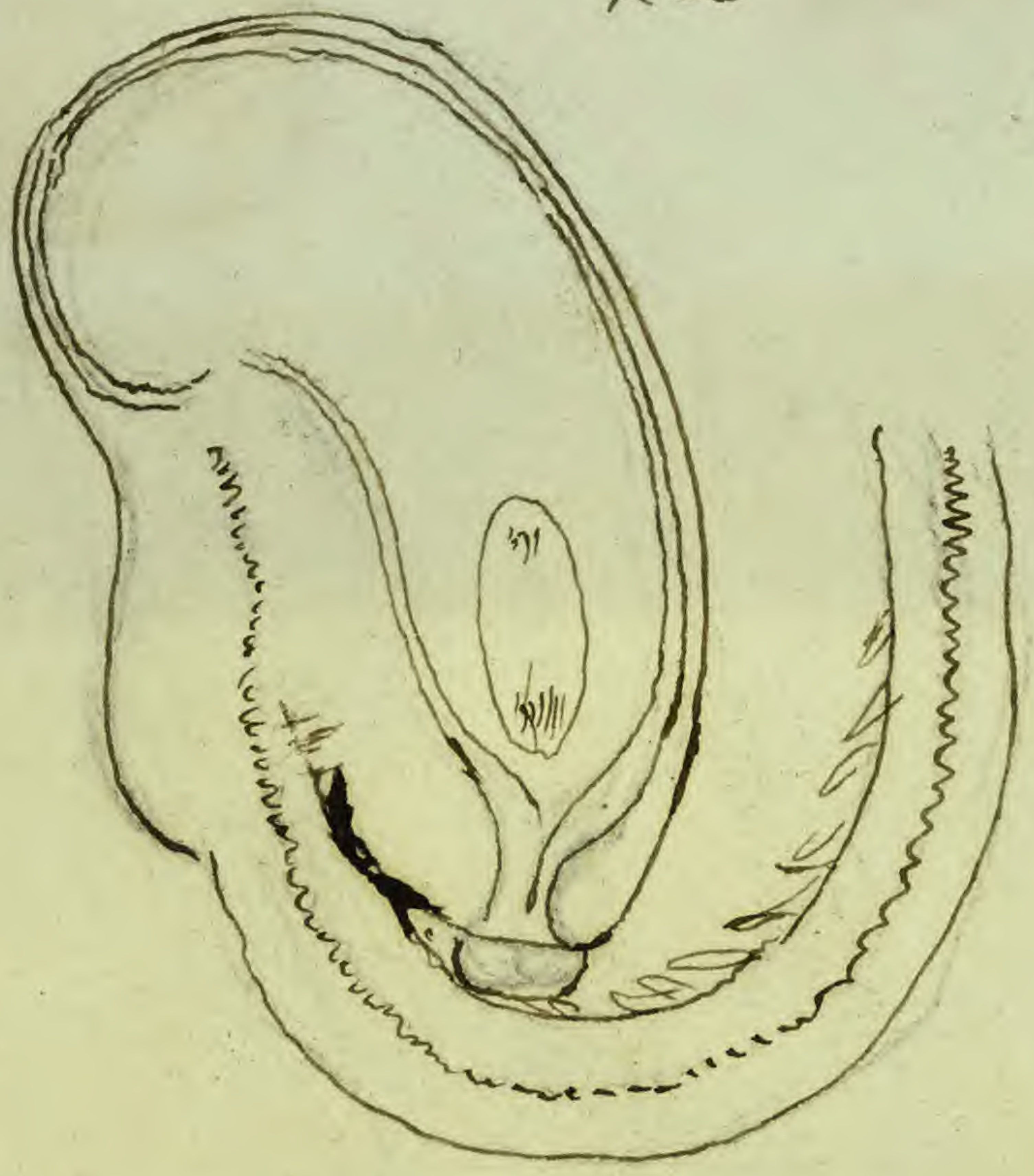
ALEX. LEITCH,
APOTHECARY & PHARMACEUTIST,
Marble Building, Cor. Fourth & Olive Sts., St. Louis, Mo.

= 0,034 – 0,036 lin

Cer variabilis

x 60

Goebel 1860



ovule soon after fecundation $\frac{17}{60}$ – $\frac{18}{60}$ lin long. or a little over $\frac{1}{4}$ line on long, branched funicle.

1910

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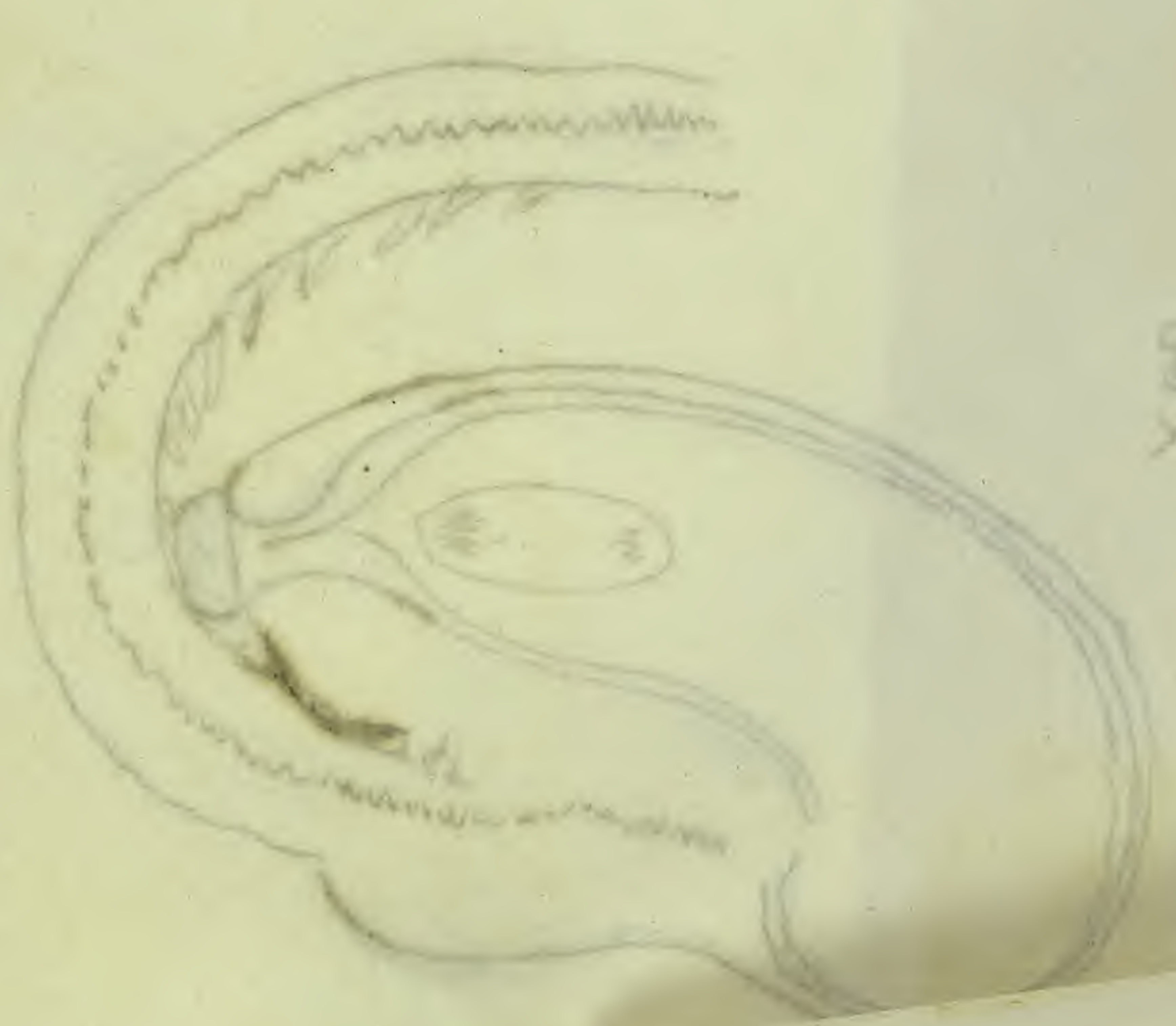
APOTHECARY & PHARMACEUTIST,
Marble Building. Cor. Fourth & Olive Sts., St. Louis, Mo.



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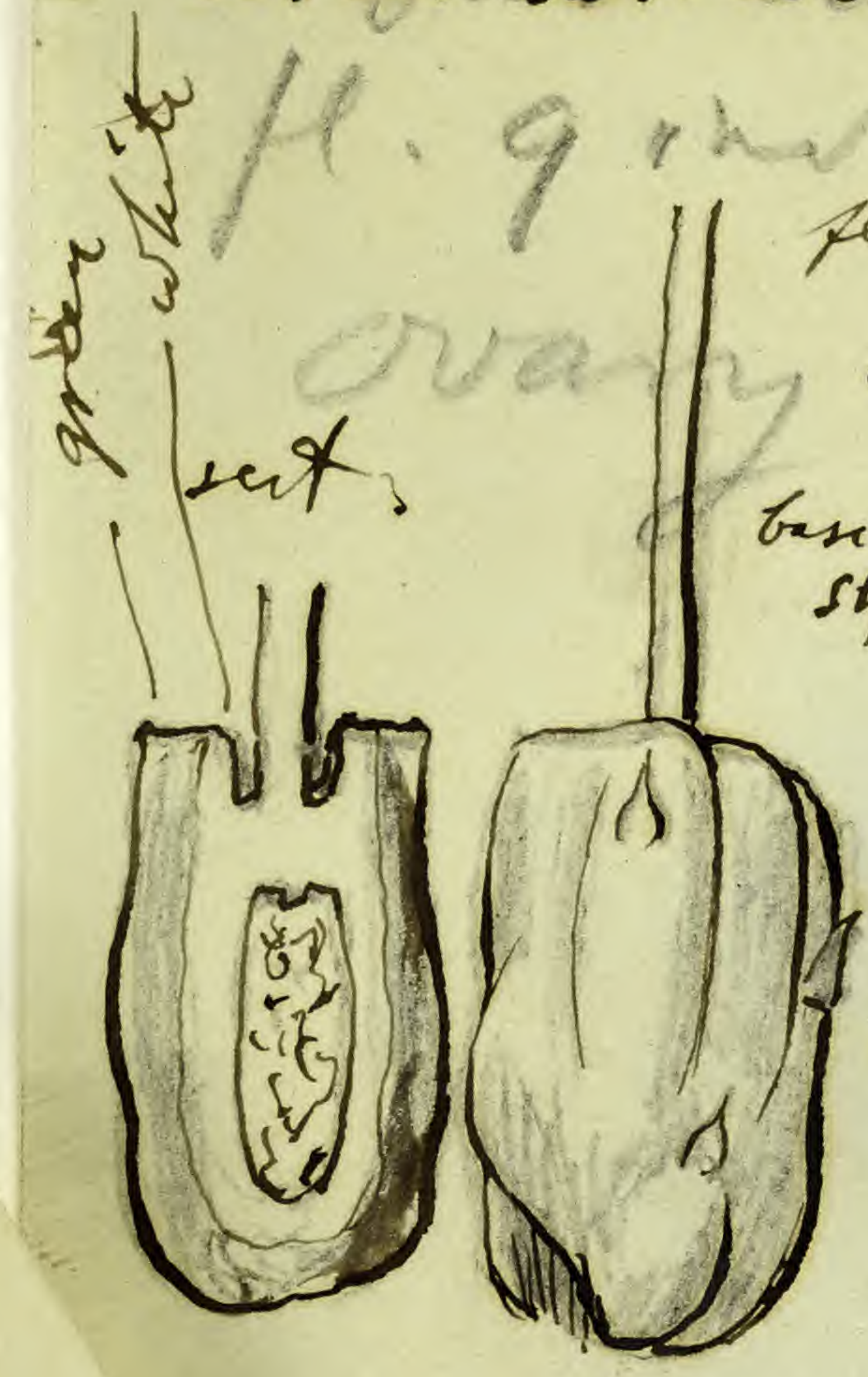
Cereus variabilis ? Hort Goebel May 1860

fl. 9 inches

ovary 13 lin.



ovary after the flower has fallen off soon after flowering

flowers 9 inches long. nightflowering, white

ovary 13 lines long with about 6 triangular-lanceolate inconspicuous, green scales

ovary irregularly tuberculate and 5angular

stigma elongated, filiform about 10.

naked part of tube over 3 inches

staminate part almost as long

6 lines naked, to corona

stamens of corona 15-18 l. long over

on the lowest 3 inches of tube only 3 small scales! triangular, green

on the next 2 inches 5 scales, a little larger, more fleshy

~~[illegible]~~ 25 linear lanceolate acute sepals

llen globose $\frac{14}{415}$ – $\frac{15}{415}$ line diameter = 0,034–0,036 lin

15

1911

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Marble Building, Cor. Fourth & Olive Sts., St. Louis, Mo.

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